THURSDAY, MARCH 16, 1876

UNIVERSITY REFORM

THE discussion in the House of Lords on the second reading of the Oxford University Bill cannot be said to have been satisfactory. Those who took part in the debate were, almost without exception, Oxford men with high honours; and they evidently represented the opinions of the majority of Oxford residents. It is, indeed, a singular circumstance that there should be among the peers so large a proportion of persons who have gained first-classes, and who have themselves held "idle fellowships;" a proportion greater than can be found in the House of Commons. But the experience contributed by them, however valuable, ought not to have monopolised the whole discussion of the matter in a legislative assembly. Such experience is of the nature of one-sided evidence, which should be heard and weighed before a decision is reached; but which cannot be permitted to substitute itself for a thorough discussion of a subject of national importance. This aspect of the debate is the more to be regretted, because it will tend to encourage the feeling, which seems to be already predominant at Oxford, that the limited vision of the present race of University residents, together with their own pecuniary interests, is to determine the course of academical reorganisation. The hopes raised by Lord Salisbury's first speech will be dashed to the ground, if such petty matters as the difference between the legislative functions of convocation and congregation, the influence of the parochial clergy on either body, or the period during which an "idle fellowship" should be tenable, are thrust forward as the supreme considerations. These subjects, no doubt, require to be discussed and settled, once and for all; and it is, perhaps, an omission that they have not found a place in the Government measure. But no misfortune would be graver than if it were to go to the country, as the Liberal peers seem to wish, that the Bill does not contain principles of reform, in comparison with which these details sink into their proper insignificance.

Lord Salisbury's speech was welcomed, certainly by men of science, and we believe also by all those whose ideal of a university is not confined to what they learned during their adult school-days at Oxford or Cambridge, because he unhesitatingly announced two new principles, upon which the whole merits of the scheme turn. He proposed that the University should be endowed at the expense of the colleges, and that scientific research should take its place in the University by the side of religion and learning. Now, these two main principles were entirely disregarded in the discussion of last Thursday; or, when they were referred to, were "damned with faint praise." The Archbishop of Canterbury, whose speech was, on the whole, worthy of his position, professed himself ignorant of the precise meaning to be attached to the word "research;" as if there had not been, during the last three years, abundance of discussion on the subject in the press, and as if it had not been defined in the report of a Royal Commission. Both Lord Carlingford and the Earl of Morley reproduce the old argument, which to those familiar with the topic has long ago been worn threadbare, that the endowment of teaching professors is the only endowment of research which is either desirable or possible. It is not necessary in these pages to show how entirely is this objection founded upon ignorance. It is enough to observe that those very persons who are the most ardent advocates of the present system of awarding fellowships as sinecures, express themselves as most fearful of the danger of opening these sinecures to the physical sciences, and imposing on their holders the duty of original investigation. Lord Morley was in his day a distinguished classical student at Balliol College; but, so far is he from understanding the new demands of the present time, that he concluded his speech with the following idle peroration:—"I trust that the University, reinforced by the proposed aids, will take up the proud position *she has so long held*, and will, I hope, long continue to hold, as *the head and centre of all science* and learning." With regard to the proposal to satisfy the admitted wants of the University out of the surplus income of the colleges, hardly a word was said. Everybody was too anxious to support the condemned system of "idle fellowships," to bestow a thought upon the profitable uses to which these misapplied funds might be devoted. And so the House of Lords read the Oxford University Bill a second time, without any deliberate consideration of its essential features, but evidently prepared to dispute in Committee over all sorts of uninteresting details.

There is, however, one important point, on which not only the House of Lords, but also the nation at large, seems in danger of being misled. This has reference to the intentions of founders, and the original object for which fellowships were endowed. It seems to be universally assumed that the intention of the founders was primarily to promote religion, and secondarily education. "Orignally," said the Earl of Carnarvon, "religion was the object of the University; then, after a struggle, learning was added;" and now it is proposed to complement the two former by the addition of research. Against the theory implied in the last clause nothing can be urged; but the two former statements represent a most perverted view of history. The Archbishop of Canterbury, who ought to be better informed, is equally wrong, though less positive. "We know very little, perhaps, now of the exact intentions of the founders. We do know that many of them were desirous to benefit their own souls by having masses celebrated in their own Colleges; . . . but when that is said, we know very little more than that they had a general desire to promote education." Now, as a matter of fact, there is no historical evidence whatever, to show that the University or the colleges commenced with religious observances, and that learning had a hard fight to enter in. So far as we know anything about the condition of the University of Oxford in the pre-collegiate epoch (and it is true that our knowledge of that period is very small), it is certain that the University of Oxford, like the sister University of Paris, was an assembly of teachers and students, by no means of priests and monks. Study was the primary object then, as later, to which religious functions were only subordinate. No doubt the majority of the learned men were *clerici*, *i.e.*, in orders, but so were the lawyers at that time, and the Universities are no more ecclesiastical corporations than

are the Inns of Court. From the date of the foundation of the first college our knowledge becomes more definite. The original statutes have been preserved, and were published to the world by the University Commissioners about twenty years ago. The evidence, therefore, of the intentions of the early founders of fellowships is abundant, and it is also decisively clear. It was, no doubt, desired that the study of Theology should be supreme, and ample provision was made for divine worship; but it must be recollected that in those days Theology included Law, and did not exclude Natural Philosophy. But what the founders had foremost in view, as might easily be shown by copious extracts from their statutes, was not religion, or even education, but advanced study. The few earliest colleges make no reference at all to the endowment of teaching. Their fellowships were established "for the support of indigent scholars in the University of Oxford, who are bound to study and make progress in the divers Sciences and Faculties." The function of teaching was left to be performed by the University, and all those who had taken the higher degrees enjoyed the privilege, as they were under the obligation, of giving instruction. "To study, not to teach, was the business of the Fellows. The founder of Queen's College has even expressly stated that he intends his benefaction to relieve his Fellows from the necessity of teaching." The full period of study required for the degree of Doctor lasted for thirteen or nineteen years, varying in the different faculties; and the fellowships were intended to support poor students during this long season of probation. Nor must it be supposed that Theology and the Classics were the only subjects meant to be encouraged. Many of the founders made provision for the study of medicine; at New College Astronomy is specially mentioned; and William of Waynflete, in the statutes of Magdalen, expressly prescribes Natural Philosophy as one of the three departments of knowledge which the Fellows were to cultivate. Other instances of a similar nature might be quoted; but nothing further is required to prove what the colleges themselves will scarcely admit, that the fellowships were given not as prizes to stimulate clever boys, nor as subsidies for academical teachers, but to promote mature study. The appeal, therefore, to the intentions of the founder does not lie in the mouth of the advocates of the existing order of things, but is one of the strongest arguments that can be used by those who support the endowment of research, which turns out to be merely the restoration of the old practice.

MINERALS OF NEW SOUTH WALES

Mines and Mineral Statistics of New South Wales. Compiled under the direction of the Hon. John Lucas, M.P.; also "Remarks on the Sedimentary Formations of New South Wales." By the Rev. W. B. Clarke, M.A., F.G.S. (Sydney, 1875.)

THE volume now before us is a companion to that we reviewed recently in this journal on the minerals and rocks of Victoria,* and like it has been called forth by the necessity of cataloguing and describing the collection of specimens exhibited at the Metropolitan Intercolonial Exhibition held at Sydney in 1875, which consisted of rock-specimens, fossils, samples of coal, ores of iron, and other metals, collected by the Examiner of Coal-fields, the Government Geologists, and furnished to a large extent by the owners of mines, the whole being arranged by Mr. C. S. Wilkinson, Government Geologist to the colony. The volume also contains statistics of the minerals raised in 1874 and preceding years. These do not pretend to be more than approximations, but they are sufficient to enable us to see the strides this great colony is making in the development of those mineral treasures which are almost lavishly bestowed throughout the area already explored, and which give promise of still wider distribution; meanwhile, the authorities seem fully alive to the importance of having accurate returns. It is stated that "the arrangements for the future are such as it is hoped will secure the collection, publication, and preservation of complete and authentic returns, and no pains will be spared to render our records of the past more complete than they are at present."

It may interest our readers, however, to be put in possession of the latest returns, which are for the year 1874, and are as follows:—

	Total Value.
Gold	£30,656,246
Coal	6,565,328
Tin	866,461
Copper	807,476
Oil-shale (Kerosine)	261,414
Silver	77,216
Iron	15,434
Antimony	897
Total	£39,220,472

It is impossible to rise from a perusal of this volume without the conviction that the resources in not only the precious metals, but the more useful minerals—coal and iron—are practically inexhaustible, and that being developed by British colonists are destined, or are at least calculated, to produce a nation rivalling the mother-country in manufacturing industry. We gather that the colonists now fully perceive this themselves; and for this they are to no small degree indebted to the voluntary labours of that veteran geologist, the Rev. W. B. Clarke, who for a quarter of a century has been engaged in exploring the interior of the continent and unfolding its geological structure. A more detailed survey is now in progress, which has been attended with highly encouraging results; and it would be well for intending settlers to possess themselves of all the available information afforded by the maps and reports of the geological surveyors, as by this means they may become the happy possessors of treasures lying below the surface. Meanwhile, sufficient is known to enable us to give a short sketch of the physical features and geological structure of this great colony.

New South Wales is bounded on the south by the Murray River—separating it from Victoria—and on the north by a line generally corresponding to the 29th parallel, by which it is separated from Queensland.

The coast line extends from Cape Howe to Point Danger, a distance of nearly 700 miles, with the Ports of Wollongong, Sydney, Newcastle, and the Clarence River at intervals. At a distance from the coast-line, varying

* "Rocks and Minerals in the Melbourne Museum," NATURE, vol. xiii. p. 165.